

## Introduction to Data Science - What is Data Science ?

- A. Based on the videos and the reading material, how would you define a data scientist and data science? **(3 marks)**

A data scientist is an individual with a curious mindset who solves problems of the real world by working with data. He or she uses data and communicates the results in an efficient way to deliver actionable results and make real impacts.

Data science is employing an amalgamation of mathematics, statistics, probability, programming and other state-of-the-art technologies to find hidden patterns or trends in data. Many companies are able to fill the gaps in their businesses by analyzing data and transforming the results of the finding to improve their strategies or operations.

- B. As discussed in the videos and the reading material, data science can be applied to problems across different industries. What industry are you passionate about and would like to pursue a data science career in? **(1 mark)**

I am very passionate about criminal enterprise and law enforcement. I would like to advance a research about the impact of organized crime on the US economy and someday, I hope to work in the government to work with crime analytics. My second most passionate industry is in finance.

- C. Based on the videos and the reading material, what are the **ten** main components of a report that would be delivered at the end of a data science project? **(5 marks)**

- 1) Cover Page
- 2) Table of Documents
- 3) Executive Summary
- 4) Introduction + Literature Review
- 5) Methodology
- 6) Results
- 7) Discussion
- 8) Conclusion
- 9) References
- 10) Acknowledgement + Appendices